=> dis his

17:11:32 COPY AND CLEAR PAGE, PLEASE
          (FILE 'USPAT' ENTERED AT 16:41:12 ON 12 JAN 95)
                    ERASE HIS
L1   189356 S MONITOR?
L2   55144 S (OPERATOR OR ATTENDANT) AND L1
L3   11678 S (NOTIFY OR NOTIFICATION OR ALARM OR ALERT) AND L2
L4   6576 S (STATUS OR ERROR) AND L3
L5   1791 S (VERIFY OR VERIFICATION OR AUTHENTICATE) AND L4
L6   803 S (USAGE OR UTILIZATION) AND L5
L7   562 S CONTROLLER AND L6
L8   290 S (364/?/CCLS OR 395/?/CCLS) AND L7
L9   219 S (MAIL OR PACKET OR MESSAGE OR TRANSACTION) AND L8
L10   102 S OPERATING SYSTEM? AND L9
L11   98 S (REMOTE OR ALIEN OR NETWORK) AND L10

=> dis l10 1-102 ti

US PAT NO: 5,371,851 [IMAGE AVAILABLE]   L10: 1 of 102
TITLE: Graphical data base editor

US PAT NO: 5,369,767 [IMAGE AVAILABLE]   L10: 2 of 102
TITLE: Servicing interrupt requests in a data processing system
                without using the services of an operating system

US PAT NO: 5,369,749 [IMAGE AVAILABLE]   L10: 3 of 102
TITLE: Method and apparatus for the direct transfer of information
                between application programs running on distinct processors
                without utilizing the services of one or both operating
                systems

US PAT NO: 5,367,609 [IMAGE AVAILABLE]   L10: 4 of 102
TITLE: Editing compressed and decompressed voice information
                simultaneously

US PAT NO: 5,363,497 [IMAGE AVAILABLE]   L10: 5 of 102
TITLE: System for removing section of memory from first system and
                allocating to second system in a manner indiscernable to
                both operating systems

US PAT NO: 5,349,685 [IMAGE AVAILABLE]   L10: 6 of 102
TITLE: Multipurpose bus interface utilizing a digital signal
                processor

US PAT NO: 5,347,632 [IMAGE AVAILABLE]   L10: 7 of 102
TITLE: Reception system for an interactive computer network and
                method of operation

US PAT NO: 5,325,517 [IMAGE AVAILABLE]   L10: 8 of 102
TITLE: Fault tolerant data processing system

US PAT NO: 5,321,816 [IMAGE AVAILABLE]   L10: 9 of 102
TITLE: Local-remote apparatus with specialized image storage modules

US PAT NO: 5,311,423 [IMAGE AVAILABLE]   L10: 10 of 102
TITLE: Schedule management method

US PAT NO: 5,307,505 [IMAGE AVAILABLE]   L10: 11 of 102
TITLE: Rapid reprogramming terminal

US PAT NO: 5,301,350 [IMAGE AVAILABLE]   L10: 12 of 102
17:11:44 COPY AND CLEAR PAGE, PLEASE

US PAT NO: 5,301,350 [IMAGE AVAILABLE]   L10: 12 of 102
TITLE: Real time storage/retrieval subsystem for document processing
                in banking operations

US PAT NO: 5,289,362 [IMAGE AVAILABLE]   L10: 13 of 102
TITLE: Energy control system

US PAT NO: 5,287,537 [IMAGE AVAILABLE]   L10: 14 of 102
TITLE: Distributed processing system having plural computers each
                using identical retaining information to identify another
                computer for executing a received command

US PAT NO: 5,285,383 [IMAGE AVAILABLE]   L10: 15 of 102
TITLE: Method for carrying out transactions of goods using electronic
                title

US PAT NO: 5,283,868 [IMAGE AVAILABLE]   L10: 16 of 102
TITLE: Providing additional system characteristics to a data
                processing system through operations of an application
                program, transparently to the operating system

US PAT NO: 5,256,863 [IMAGE AVAILABLE]   L10: 17 of 102
TITLE: In-store universal control system

US PAT NO: 5,255,185 [IMAGE AVAILABLE]   L10: 18 of 102
TITLE: Bowling center video display system

US PAT NO: 5,247,614 [IMAGE AVAILABLE]   L10: 19 of 102
TITLE: Method and apparatus for distributed processing of display
                panel information

US PAT NO: 5,241,657 [IMAGE AVAILABLE]   L10: 20 of 102
TITLE: Information display system

US PAT NO: 5,214,579 [IMAGE AVAILABLE]   L10: 21 of 102
TITLE: Goal-oriented investment indexing, tracking and monitoring
                data processing system

US PAT NO: 5,210,704 [IMAGE AVAILABLE]   L10: 22 of 102
TITLE: System for prognosis and diagnostics of failure and wearout
                monitoring and for prediction of life expectancy of
                helicopter gearboxes and other rotating equipment

US PAT NO: 5,189,624 [IMAGE AVAILABLE]   L10: 23 of 102
TITLE: Intelligent machining workstation operating logic

US PAT NO: 5,179,627 [IMAGE AVAILABLE]   L10: 24 of 102
TITLE: Digital dictation system

US PAT NO: 5,170,466 [IMAGE AVAILABLE]   L10: 25 of 102
TITLE: Storage/retrieval system for document

US PAT NO: 5,168,444 [IMAGE AVAILABLE]   L10: 26 of 102
TITLE: Shipment system including processing of document images

US PAT NO: 5,155,809 [IMAGE AVAILABLE]   L10: 27 of 102
TITLE: Uncoupling a central processing unit from its associated
                hardware for interaction with data handling apparatus alien
                to the operating system controlling said unit and hardware
17:11:51 COPY AND CLEAR PAGE, PLEASE

US PAT NO: 5,144,692 [IMAGE AVAILABLE]   L10: 28 of 102
TITLE: System for controlling access by first system to portion of
                main memory dedicated exclusively to second system to
                facilitate input/output processing via first system

US PAT NO: 5,122,959 [IMAGE AVAILABLE]   L10: 29 of 102
TITLE: Transportation dispatch and delivery tracking system

US PAT NO: 5,118,105 [IMAGE AVAILABLE]   L10: 30 of 102
TITLE: Bowling statistics display system

US PAT NO: 5,113,522 [IMAGE AVAILABLE]   L10: 31 of 102
TITLE: Data processing system with system resource management for
                itself and for an associated alien processor

US PAT NO: 5,113,500 [IMAGE AVAILABLE]   L10: 32 of 102
TITLE: Multiple cooperating and concurrently operating processors
                using individually dedicated memories

US PAT NO: 5,113,496 [IMAGE AVAILABLE]   L10: 33 of 102
TITLE: Bus interconnection structure with redundancy linking
                plurality of groups of processors, with servers for each
                group mounted on chassis

US PAT NO: 5,101,354 [IMAGE AVAILABLE]   L10: 34 of 102
TITLE: Multi-lane bowling system with remote operator control

US PAT NO: 5,101,200 [IMAGE AVAILABLE]   L10: 35 of 102
TITLE: Fast lane credit card

US PAT NO: 5,063,507 [IMAGE AVAILABLE]   L10: 36 of 102
TITLE: Goods database employing electronic title or documentary-type
                title

US PAT NO: 5,058,185 [IMAGE AVAILABLE]   L10: 37 of 102
TITLE: Object management and delivery system having multiple
                object-resolution capability

US PAT NO: 5,034,598 [IMAGE AVAILABLE]   L10: 38 of 102
TITLE: Keyboard emulation system providing audible feedback without a
                built-in transducer

US PAT NO: 5,022,076 [IMAGE AVAILABLE]   L10: 39 of 102
TITLE: Redundant encryption processor arrangement for use in an
                electronic fund transfer network

US PAT NO: 5,021,949 [IMAGE AVAILABLE]   L10: 40 of 102
TITLE: Method and apparatus for linking an SNA host to a remote SNA
                host over a packet switched communications network

US PAT NO: 5,016,162 [IMAGE AVAILABLE]   L10: 41 of 102
TITLE: Contention revolution in a digital computer system

US PAT NO: 4,977,529 [IMAGE AVAILABLE]   L10: 42 of 102
TITLE: Training simulator for a nuclear power plant

US PAT NO: 4,965,825 [IMAGE AVAILABLE]   L10: 43 of 102
TITLE: Signal processing apparatus and methods
17:12:00 COPY AND CLEAR PAGE, PLEASE

US PAT NO: 4,937,036 [IMAGE AVAILABLE]   L10: 44 of 102
TITLE: Concurrent display of data from two different display
                processors and user interface therefore

US PAT NO: 4,928,245 [IMAGE AVAILABLE]   L10: 45 of 102
TITLE: Automated cartridge system

US PAT NO: 4,920,483 [IMAGE AVAILABLE]   L10: 46 of 102
TITLE: A computer memory for accessing any word-sized group of
                contiguous bits

US PAT NO: 4,885,685 [IMAGE AVAILABLE]   L10: 47 of 102
TITLE: Investment management system with travel usage funds indexed
                to customer account status

US PAT NO: 4,882,727 [IMAGE AVAILABLE]   L10: 48 of 102
TITLE: Adaptive digital network interface

US PAT NO: 4,881,230 [IMAGE AVAILABLE]   L10: 49 of 102
TITLE: Expert system for processing errors in a multiplex
                communications system

US PAT NO: 4,873,687 [IMAGE AVAILABLE]   L10: 50 of 102
TITLE: Failing resource manager in a multiplex communication system

US PAT NO: 4,872,130 [IMAGE AVAILABLE]   L10: 51 of 102
TITLE: Automated in-line pipe inspection system

US PAT NO: 4,866,661 [IMAGE AVAILABLE]   L10: 52 of 102
TITLE: Computer controlled rental and sale system and method for a
                supermarket and the like

US PAT NO: 4,864,511 [IMAGE AVAILABLE]   L10: 53 of 102
TITLE: Automated cartridge system

US PAT NO: 4,829,445 [IMAGE AVAILABLE]   L10: 54 of 102
TITLE: Distributed routing unit for fully-automated flexible
                manufacturing system

US PAT NO: 4,817,092 [IMAGE AVAILABLE]   L10: 55 of 102
TITLE: Threshold alarms for processing errors in a multiplex
                communications system

US PAT NO: 4,764,863 [IMAGE AVAILABLE]   L10: 56 of 102
TITLE: Hardware interpreter for finite state automata

US PAT NO: 4,754,326 [IMAGE AVAILABLE]   L10: 57 of 102
TITLE: Method and apparatus for assisting user of information
               retrieval systems

US PAT NO: 4,660,168 [IMAGE AVAILABLE]   L10: 58 of 102
TITLE: Apparatus for completing a customer initiated ATM transaction

US PAT NO: 4,648,064 [IMAGE AVAILABLE]   L10: 59 of 102
TITLE: Parallel process controller

US PAT NO: 4,636,947 [IMAGE AVAILABLE]   L10: 60 of 102
TITLE: ATM task scheduling system for simultaneous peripheral device
               transactions processing
17:12:09 COPY AND CLEAR PAGE, PLEASE

US PAT NO: 4,636,939 [IMAGE AVAILABLE]   L10: 61 of 102
TITLE: Parallel bus protocol

US PAT NO: 4,625,276 [IMAGE AVAILABLE]   L10: 62 of 102
TITLE: Data logging and transfer system using portable and resident
               units

US PAT NO: 4,621,326 [IMAGE AVAILABLE]   L10: 63 of 102
TITLE: Method of reducing customer transaction time in an automatic
               teller machine by parallel processing of sequence events

US PAT NO: 4,608,688 [IMAGE AVAILABLE]   L10: 64 of 102
TITLE: Processing system tolerant of loss of access to secondary
               storage

US PAT NO: 4,590,583 [IMAGE AVAILABLE]   L10: 65 of 102
TITLE: Coin telephone measurement circuitry

US PAT NO: 4,570,217 [IMAGE AVAILABLE]   L10: 66 of 102
TITLE: Man machine interface

US PAT NO: 4,554,642 [IMAGE AVAILABLE]   L10: 67 of 102
TITLE: Digital filtering with monitored settling time

US PAT NO: 4,542,469 [IMAGE AVAILABLE]   L10: 68 of 102
TITLE: Programmable demand register with two way communication
               through an optical port and external reading devices
               associated therewith

US PAT NO: 4,539,652 [IMAGE AVAILABLE]   L10: 69 of 102
TITLE: Networks for data communication

US PAT NO: 4,536,126 [IMAGE AVAILABLE]   L10: 70 of 102
TITLE: System and method employing a digital computer for
               automatically synchronizing a gas turbine or other electric
               power plant generator with a power system

US PAT NO: 4,527,237 [IMAGE AVAILABLE]   L10: 71 of 102

TITLE: Data processing system

US PAT NO: 4,525,795 [IMAGE AVAILABLE]   L10: 72 of 102
TITLE: Digital signal generator

US PAT NO: 4,525,789 [IMAGE AVAILABLE]   L10: 73 of 102
TITLE: Programmable network tester with data formatter

US PAT NO: 4,525,780 [IMAGE AVAILABLE]   L10: 74 of 102
TITLE: Data processing system having a memory using object-based
                information and a protection scheme for determining access
                rights to such information

US PAT NO: 4,516,199 [IMAGE AVAILABLE]   L10: 75 of 102
TITLE: Data processing system

US PAT NO: 4,501,003 [IMAGE AVAILABLE]   L10: 76 of 102
TITLE: Dial pulse measurement circuitry

US PAT NO: 4,493,027 [IMAGE AVAILABLE]   L10: 77 of 102
17:12:17 COPY AND CLEAR PAGE, PLEASE

US PAT NO: 4,493,027 [IMAGE AVAILABLE]   L10: 77 of 102
TITLE: Method of performing a call operation in a digital data
                processing system having microcode call and return
                operations

US PAT NO: 4,457,772 [IMAGE AVAILABLE]   L10: 78 of 102
TITLE: Management control system for forming glassware

US PAT NO: 4,455,614 [IMAGE AVAILABLE]   L10: 79 of 102
TITLE: Gas turbine and steam turbine combined cycle electric power
                generating plant having a coordinated and hybridized control
                system and an improved factory based method for making and
                testing combined cycle and other power plants and control
                systems therefor

US PAT NO: 4,455,602 [IMAGE AVAILABLE]   L10: 80 of 102
TITLE: Digital data processing system having an I/O means using
                unique address providing and access priority control
                techniques

US PAT NO: 4,445,177 [IMAGE AVAILABLE]   L10: 81 of 102
TITLE: Digital data processing system utilizing a unique arithmetic
                logic unit for handling uniquely identifiable addresses for
                operands and instructions

US PAT NO: 4,398,264 [IMAGE AVAILABLE]   L10: 82 of 102
TITLE: Circuit to enable foreground and background processing in a
                word processing system with circuits for performing a
                plurality of independently controlled functions .

US PAT NO: 4,398,246 [IMAGE AVAILABLE]   L10: 83 of 102
TITLE: Word processing system employing a plurality of general
                purpose processor circuits

US PAT NO: 4,392,197 [IMAGE AVAILABLE]   L10: 84 of 102
TITLE: Print control circuit for a word processing system

US PAT NO: 4,387,424 [IMAGE AVAILABLE]   L10: 85 of 102
TITLE: Communications systems for a word processing system employing
                distributed processing circuitry

US PAT NO: 4,354,225 [IMAGE AVAILABLE]   L10: 86 of 102
TITLE: Intelligent main store for data processing systems

US PAT NO: 4,328,543 [IMAGE AVAILABLE]   L10: 87 of 102
TITLE: Control architecture for a communications controller

US PAT NO: 4,320,451 [IMAGE AVAILABLE]   L10: 88 of 102
TITLE: Extended semaphore architecture

US PAT NO: 4,318,182 [IMAGE AVAILABLE]   L10: 89 of 102
TITLE: Deadlock detection and prevention mechanism for a computer
                system

US PAT NO: 4,316,245 [IMAGE AVAILABLE]   L10: 90 of 102
TITLE: Apparatus and method for semaphore initialization in a
                multiprocessing computer system for process synchronization

US PAT NO: 4,283,766 [IMAGE AVAILABLE]   L10: 91 of 102
17:12:24 COPY AND CLEAR PAGE, PLEASE

US PAT NO: 4,283,766 [IMAGE AVAILABLE]   L10: 91 of 102
TITLE: Automatic camera control for creating special effects in
                motion picture photography

US PAT NO: 4,267,458 [IMAGE AVAILABLE]   L10: 92 of 102
TITLE: System and method for starting, synchronizing and operating a
                steam turbine with digital computer control

US PAT NO: 4,253,146 [IMAGE AVAILABLE]   L10: 93 of 102
TITLE: Module for coupling computer-processors

US PAT NO: 4,253,144 [IMAGE AVAILABLE]   L10: 94 of 102
TITLE: Multi-processor communication network

US PAT NO: 4,245,306 [IMAGE AVAILABLE]   L10: 95 of 102
TITLE: Selection of addressed processor in a multi-processor network

US PAT NO: 4,240,143 [IMAGE AVAILABLE]   L10: 96 of 102
TITLE: Hierarchical multi-processor network for memory sharing

US PAT NO: 4,180,854 [IMAGE AVAILABLE]   L10: 97 of 102
TITLE: Programmable calculator having string variable editing
                capability

US PAT NO: 4,162,536 [IMAGE AVAILABLE]   L10: 98 of 102
TITLE: Digital input/output system and method

US PAT NO: 4,099,234 [IMAGE AVAILABLE]   L10: 99 of 102
TITLE: Input/output processing system utilizing locked processors

US PAT NO: 4,031,407 [IMAGE AVAILABLE]   L10: 100 of 102
TITLE: System and method employing a digital computer with improved
                programmed operation for automatically synchronizing a gas
                turbine or other electric power plant generator with a power
                system

US PAT NO: 3,905,023 [IMAGE AVAILABLE]   L10: 101 of 102
TITLE: Large scale multi-level information processing system
                employing improved failsaft techniques

US PAT NO: 3,820,079 [IMAGE AVAILABLE]   L10: 102 of 102
TITLE: BUS ORIENTED, MODULAR, MULTIPROCESSING COMPUTER

=>

=> dis his

```
          (FILE 'USPAT' ENTERED AT 16:41:12 ON 12 JAN 95)
                    SET PAGELENGTH 62
                    SET LINELENGTH 78
L1        176850 S REMOTE
L2         33060 S L1 AND MONITOR?
L3         13001 S OPERATOR AND L2
L4          6730 S (STATUS OR ERROR) AND L3
L5           899 S (OPERATING SYSTEM) AND L4
L6           413 S (PAGING OR ALARM OR ALERT) AND L5
L7           196 S (VERIFY OR VERIFICATION) AND L6
L8            64 S MONITOR?/TI,AB,CLM AND L7
L9            20 S (UTILIZATION) AND L8
                 ERASE L10
L10         5927 S NOTIFY OR NOTIFICATION
L11          230 S L10 AND L5
L12          131 S (VERIFY OR VERIFICATION) AND L11
L13          253 S L12 OR L7
L14        52450 S MONITOR?/TI,AB,CLM
L15           85 S L14 AND L13
L16           24 S UTILIZATION AND L15
                 ERASE L17-L18
16:53:36 COPY AND CLEAR PAGE, PLEASE
L17           37 S USAGE AND L15
L18           52 S L16 OR L17
```

=>

=> dis his

```
(FILE 'USPAT' ENTERED AT 08:32:38 ON 13 JAN 95)
            SET PAGELENGTH 62
            SET LINELENGTH 78
L1       15554 S HETEROGENEOUS
L2         866 S MONITOR AND L1
L3         298 S (REMOTE OR HOST OR NETWORK) AND L2
L4         233 S (ERROR OR STATUS OR STATE OR OPERATIONAL) AND L3
L5          33 S (ALARM OR ALERT OR NOTIFY) AND L4
```

08:39:05 COPY AND CLEAR PAGE, PLEASE
13 JAN 95 08:39:09   U.S. Patent & Trademark Office   P0009
=> dis l5 1-33 ti

US PAT NO: 5,375,070 [IMAGE AVAILABLE]   L5: 1 of 33
TITLE: Information collection architecture and method for a data
                 communications network

US PAT NO: 5,369,570 [IMAGE AVAILABLE]   L5: 2 of 33
TITLE: Method and system for continuous integrated resource
                 management

US PAT NO: 5,367,643 [IMAGE AVAILABLE]   L5: 3 of 33
TITLE: Generic high bandwidth adapter having data packet memory
                 configured in three level hierarchy for temporary storage of
                 variable length data packets

US PAT NO: 5,365,514 [IMAGE AVAILABLE]   L5: 4 of 33
TITLE: Event driven interface for a system for monitoring and
                 controlling a data communications network

US PAT NO: 5,337,320 [IMAGE AVAILABLE]   L5: 5 of 33
TITLE: Semi-automatic mode of network design

US PAT NO: 5,329,619 [IMAGE AVAILABLE]   L5: 6 of 33
TITLE: Cooperative processing interface and communication broker for
                 heterogeneous computing environments

US PAT NO: 5,324,028 [IMAGE AVAILABLE]   L5: 7 of 33
TITLE: Intelligent golf parties guidance system

US PAT NO: 5,317,568 [IMAGE AVAILABLE]   L5: 8 of 33
TITLE: Method and apparatus for managing and facilitating
                 communications in a distributed hetergeneous network

US PAT NO: 5,295,230 [IMAGE AVAILABLE]   L5: 9 of 33
TITLE: Knowledge representation for expert system

US PAT NO: 5,265,206 [IMAGE AVAILABLE]   L5: 10 of 33
TITLE: System and method for implementing a messenger and object
                 manager in an object oriented programming environment

US PAT NO: 5,241,625 [IMAGE AVAILABLE]   L5: 11 of 33
TITLE: Screen image sharing among heterogeneous computers

US PAT NO: 5,223,410 [IMAGE AVAILABLE]   L5: 12 of 33

TITLE: Method for production of antibodies utilizing an antigen-free
                  animal

US PAT NO: 5,222,032 [IMAGE AVAILABLE]   L5: 13 of 33
TITLE: System and method for monitoring the concentration of volatile
                  material dissolved in a liquid

US PAT NO: 5,159,685 [IMAGE AVAILABLE]   L5: 14 of 33
TITLE: Expert system for communications `network`

US PAT NO: 5,146,086 [IMAGE AVAILABLE]   L5: 15 of 33
TITLE: Method and apparatus for imaging porous media and method for
                  fabricating novel optical materials

US PAT NO: 5,120,834 [IMAGE AVAILABLE]   L5: 16 of 33
08:39:19 COPY AND CLEAR PAGE, PLEASE
13 JAN 95 08:39:23   U.S. Patent & Trademark Office   P0010

US PAT NO: 5,120,834 [IMAGE AVAILABLE]   L5: 16 of 33
TITLE: Fibrin-specific monoclonal antibody

US PAT NO: 5,091,512 [IMAGE AVAILABLE]   L5: 17 of 33
TITLE: Fibrinogen-specific monoclonal antibody

US PAT NO: 5,082,630 [IMAGE AVAILABLE]   L5: 18 of 33
TITLE: Fiber optic detector for immuno-testing

US PAT NO: 5,047,044 [IMAGE AVAILABLE]   L5: 19 of 33
TITLE: Medical droplet whole blood and like monitoring

US PAT NO: 5,032,525 [IMAGE AVAILABLE]   L5: 20 of 33
TITLE: Qualitative process automation for autoclave cure of composite
                  parts

US PAT NO: 4,995,402 [IMAGE AVAILABLE]   L5: 21 of 33
TITLE: Medical droplet whole blood and like monitoring

US PAT NO: 4,950,588 [IMAGE AVAILABLE]   L5: 22 of 33
TITLE: Prolonged enhanced chemiluminescence

US PAT NO: 4,853,327 [IMAGE AVAILABLE]   L5: 23 of 33
TITLE: Enhanced phthalazinedione chemiluminescence

US PAT NO: 4,829,445 [IMAGE AVAILABLE]   L5: 24 of 33
TITLE: Distributed routing unit for fully-automated flexible
                  manufacturing system

US PAT NO: 4,785,396 [IMAGE AVAILABLE]   L5: 25 of 33
TITLE: Push-pull serial bus coupled to a plurality of devices each
                  having collision detection circuit and arbitration circuit

US PAT NO: 4,580,574 [IMAGE AVAILABLE]   L5: 26 of 33
TITLE: Method and device for non-invasively monitoring the
                  instantaneous fluctuations in the viscoelastic-related
                  properties of a living tissue

US PAT NO: 4,527,237 [IMAGE AVAILABLE]   L5: 27 of 33

TITLE: Data processing system

US PAT NO: 4,516,199 [IMAGE AVAILABLE]   L5: 28 of 33
TITLE: Data processing system

US PAT NO: 4,354,225 [IMAGE AVAILABLE]   L5: 29 of 33
TITLE: Intelligent main store for data processing systems

US PAT NO: 4,177,514 [IMAGE AVAILABLE]   L5: 30 of 33
TITLE: Graph architecture information processing system

US PAT NO: 4,064,006 [IMAGE AVAILABLE]   L5: 31 of 33
TITLE: Method for the continuous mass in vitro suspension culture of
                 cells

US PAT NO: 4,060,717 [IMAGE AVAILABLE]   L5: 32 of 33
TITLE: Acid tester

US PAT NO: 3,898,467 [IMAGE AVAILABLE]   L5: 33 of 33
08:39:27 COPY AND CLEAR PAGE, PLEASE
13 JAN 95 08:39:31   U.S. Patent & Trademark Office   P0011

US PAT NO: 3,898,467 [IMAGE AVAILABLE]   L5: 33 of 33
TITLE: Method and apparatus for continuous monitoring and control of
                 neutron absorption properties of chemical shim with
                 temperature compensation

=>

```
> s email
L12          69 EMAIL
=> s 112(50a)(verif? or status or state or condition)
        51078 VERIF?
        62034 STATUS
       577524 STATE
       576769 CONDITION

L13          17 L12(50A)(VERIF? OR STATUS OR STATE OR CONDITION)
=> d 1-17
```

1. 5,590,128, Dec. 31, 1996, Dial lists for computer-based conferencing
systems; Michael Maloney, et al., 370/260; 379/202 [IMAGE AVAILABLE]

2. 5,588,009, Dec. 24, 1996, Personal paging, communications, and
locating system; Craig A. Will, 371/33 [IMAGE AVAILABLE]

3. 5,574,934, Nov. 12, 1996, Preemptive priority-based transmission of
signals using virtual channels; Mojtaba Mirashrafi, et al., 395/800;
340/825.16, 825.5; 348/12, 15; 364/231.4, 241.2, DIG.1, DIG.2; 379/94;
395/561, 788 [IMAGE AVAILABLE]

4. 5,551,033, Aug. 27, 1996, Apparatus for maintaining one interrupt
mask register in conformity with another in a manner invisible to an
executing program; Mark J. Foster, et al., 395/653; 364/231, 231.1,
231.4, 231.6, 239.9, 240, 242.1, 246, 246.3, 261.3, 262.4, DIG.1, DIG.2;
395/734, 869 [IMAGE AVAILABLE]

5. 5,493,568, Feb. 20, 1996, Media dependent module interface for
computer-based conferencing system; Ketan Sampat, et al., 370/261, 264,
465; 379/202 [IMAGE AVAILABLE]

6. 5,493,105, Feb. 20, 1996, Electronic business card system; Nimesh R.
Desai, 235/375 [IMAGE AVAILABLE]

7. 5,479,408, Dec. 26, 1995, Wireless personal paging, communications,
and locating system; Craig A. Will, 370/313; 340/825.44; 370/349; 379/56;
455/38.1 [IMAGE AVAILABLE]

8. 5,450,395, Sep. 12, 1995, Code position modulation system and method
for multiple user satellite communications; George R. Hostetter, et al.,
370/320; 455/38.3, 50.1 [IMAGE AVAILABLE]

9. 5,446,904, Aug. 29, 1995, Suspend/resume capability for a protected
mode microprocessor; Steven L. Belt, et al., 395/750; 364/231.1, 238.5,
273.1, DIG.1; 395/821 [IMAGE AVAILABLE]

10. 5,313,457, May 17, 1994, Code position modulation system and method for multiple user satellite communications; George R. Hostetter, et al., 370/320; 375/200 [IMAGE AVAILABLE]

11. 5,282,207, Jan. 25, 1994, Frame compression in integrated services networks; Mark Jurkevich, et al., 370/468, 477 [IMAGE AVAILABLE]

12. 5,282,202, Jan. 25, 1994, Composite frame reconfiguration in integrated services networks; Simon Bernstein, et al., 370/468, 230 [IMAGE AVAILABLE]

13. 5,251,209, Oct. 5, 1993, Prioritizing attributes in integrated services networks; Mark Jurkevich, et al., 370/468, 230, 471 [IMAGE AVAILABLE]

14. 5,247,516, Sep. 21, 1993, Configurable composite data frame; Simon Bernstein, et al., 370/468, 471, 477 [IMAGE AVAILABLE]

15. 5,229,992, Jul. 20, 1993, Fixed interval composite framing in integrated services networks; Mark Jurkevich, et al., 370/468, 471 [IMAGE AVAILABLE]

16. 5,200,952, Apr. 6, 1993, Adaptive VCP control in integrated services networks; Simon Bernstein, et al., 370/466, 471 [IMAGE AVAILABLE]

17. 5,164,938, Nov. 17, 1992, Bandwidth seizing in integrated services networks; Mark Jurkevich, et al., 370/231, 391, 400, 468, 474, 477, 538 [IMAGE AVAILABLE]
=> d 1-10 fd,rel,as

US PAT NO: 5,590,128 [IMAGE AVAILABLE]   L13: 1 of 17
DATE FILED: Jun. 7, 1995
REL-US-DATA: Continuation of Ser. No. 341,402, Nov. 16, 1994, Pat. No.
                 5,524,110, which is a continuation-in-part of Ser. No.
                 340,172, Nov. 15, 1994, which is a continuation-in-part
                 of Ser. No. 157,694, Nov. 24, 1993, Pat. No. 5,506,954.
ASSIGNEE: Intel Corporation, Santa Clara, CA (U.S. corp.)

US PAT NO: 5,588,009 [IMAGE AVAILABLE]   L13: 2 of 17
DATE FILED: Feb. 3, 1994

US PAT NO: 5,574,934 [IMAGE AVAILABLE]   L13: 3 of 17
DATE FILED: Nov. 15, 1994
REL-US-DATA: Continuation-in-part of Ser. No. 157,694, Nov. 24, 1993.
ASSIGNEE: Intel Corporation, Santa Clara, CA (U.S. corp.)

US PAT NO: 5,551,033 [IMAGE AVAILABLE]   L13: 4 of 17

DATE FILED: Jun. 4, 1992
REL-US-DATA: Division of Ser. No. 752,342, Aug. 30, 1991, which is a
                continuation-in-part of Ser. No. 705,039, May 17, 1991.
ASSIGNEE: Zenith Data Systems Corporation, Buffalo Grove, IL (U.S.
                corp.)

US PAT NO: 5,493,568 [IMAGE AVAILABLE]   L13: 5 of 17
DATE FILED: Mar. 13, 1995
REL-US-DATA: Continuation of Ser. No. 341,402, Nov. 16, 1994, which is
                a continuation-in-part of Ser. No. 340,172, Nov. 15,
                1994, which is a continuation-in-part of Ser. No.
                157,694, Nov. 24, 1993.
ASSIGNEE: Intel Corporation, Santa Clara, CA (U.S. corp.)

US PAT NO: 5,493,105 [IMAGE AVAILABLE]   L13: 6 of 17
DATE FILED: Apr. 19, 1994

US PAT NO: 5,479,408 [IMAGE AVAILABLE]   L13: 7 of 17
DATE FILED: Feb. 22, 1994

US PAT NO: 5,450,395 [IMAGE AVAILABLE]   L13: 8 of 17
DATE FILED: Jan. 10, 1994
REL-US-DATA: Division of Ser. No. 868,985, Apr. 14, 1992, Pat. No.
                5,313,457.
ASSIGNEE: Trimble Navigation Limited, Sunnyvale, CA (U.S. corp.)

US PAT NO: 5,446,904 [IMAGE AVAILABLE]   L13: 9 of 17
DATE FILED: Jun. 4, 1992
REL-US-DATA: Division of Ser. No. 752,342, Aug. 30, 1991, which is a
                continuation-in-part of Ser. No. 705,039, May 17, 1991,
                abandoned.
ASSIGNEE: Zenith Data Systems Corporation, Buffalo Grove, IL (U.S.
                corp.)

US PAT NO: 5,313,457 [IMAGE AVAILABLE]   L13: 10 of 17
DATE FILED: Apr. 14, 1992
ASSIGNEE: Trimble Navigation Limited, Sunnyvale, CA (U.S. corp.)
=> d 1-17 ab,kwic

US PAT NO: 5,590,128 [IMAGE AVAILABLE]   L13: 1 of 17

ABSTRACT:
The user of a local computer node (i.e., a caller) selects a remote
computer node (i.e., a callee) for a computer conference call from a
display containing a directory of possible callees. In one embodiment,
the directory is an alphabetical combination of a network list maintained
by a network administrator and a personal list for the caller. The user

of the caller can access and edit the personal list, but only access the network list. When displayed to the user, the possible callees from the personal list are distinguishable from the possible callees from the network list.

DETDESC:

DETD(929)

. . .

```
char    JobPosition[64]
                Pres, VP, Manager, etc
char    CompanyName[64]
                Company name
char    Street[80]
                Street
char    City[32]   City
char    **State**.sub.-- Province[32]
                **State** or province name
char    Zip.sub.-- PostalCode[32]
                Zip code or postal code
char    Country[32]
                Country
char    **Email**[64] **Email** address
char    Telephone1[32]
                Office phone number
char    Telephone2[32]
                Office phone number
char    Fax[32]    Fax number
V.sub.-- CBACK (lParam.   .   .
```

DETDESC:

DETD(2396)

. . .

```
of ATTR structures. xxxx is a place
holder for the media.
ATTR FirstName;
ATTR Addr1;
ATTR Addr2;
ATTR City;
ATTR **State**;
ATTR Country;
ATTR PostalCode;
ATTR **Email**;
ATTR ISDNNum;
ATTR PhoneNum;
ATTR FaxNum;
```

```
ATTR Orgn;
ATTR Title;
}AUTOREG;
typedef struct tagDateTime
{
BYTE byMonth;
BYTE byDay;
BYTE.   .   .
```

ABSTRACT:
A method and apparatus for sending paging signals and messages to
individuals within a building and accepting responses to the messages.
Messages may be initiated by electronic mail, incoming telephone calls,
incoming Fax messages, or other sources. Data is sent via radio to a
communications unit carried by the individual and displayed visually
together with possible responses. Each unit transmits its identity and
responses or original messages when desired via coded infrared light (or,
in an alternative embodiment, ultrasound) to one or more remote stations
located in rooms or along corridors of the building. A remote station
relays data to a central station via wire or optical fiber, which tracks
the location of units and delivers messages. Communication units are
clipped to the clothing of users and can be incorporated into a corporate
employee identification badge. The hybrid radio-infrared light approach
combines the broad, reliable characteristics of radio communication with
the ability of infrared light to allow each unit to be located. This
allows highly reliable delivery of messages via an acknowledgement and
retransmission protocol, two-way communication with the individual, and
capabilities (such as those for transferring incoming telephone calls)
that require the location of the individual to be known.

DETDESC:

DETD(62)

If .   .   .   the present location of the communications unit and the time
the unit last responded is looked up in the Unit **Status** List 233, a
response **email** message containing this information is sent to the
originator, and the module is done. (If the user has set privacy.   .   .

DETDESC:

DETD(63)

If .   .   .   checked and, if the originator has the appropriate
privileges, the appropriate changes are made 234, a response message sent

235 **verifying** the changes, and the module is done. Changes to and queries of tables that define users, user IDs, telephone extensions, and locations and telephone extensions near remote stations are made using a simple set of commands contained in **email** messages that can be originated at any workstation connected via the **email** server to the system. Users can also define preprogrammed responses, messages, and email addresses, and set parameters, in this way.

US PAT NO: 5,574,934 [IMAGE AVAILABLE]   L13: 3 of 17

ABSTRACT:
A computer system for transmitting two or more types of signals. Each type of signal is assigned a priority level. Signals of a particular type are transmitted as they become ready for transmission, unless signals of a different type having a greater priority become ready for transmission. In that case, the transmission of the low-priority signals is interrupted to allow transmission of the high-priority signals. The transmission of the low-priority signals is resumed after the transmission of the high-priority signals is complete. In a preferred embodiment directed to conferencing systems, audio signals are assigned higher priorities than video, data, and control signals in order to provide a high-quality to the audio portion of a conferencing session.

DETDESC:

DETD(873)
.   .   .
Name
        64 characters
                User's company name
Street   80 characters
                Street name
City   32 characters
                City name
State/Province
        32 characters
                State or province name
Postal Code
        32 characters
                Zip code or postal code
Country   32 characters
                Country name
Email   64 characters
                Email address
Telephone #1
        32 characters
                Office phone number

Telephone #2
        32 characters
                    Office phone number
Fax.   .   .

DETDESC:

DETD(1158)

    .   .   .

char   JobPosition[64]
                    Pres, VP, Manager, etc
char   CompanyName[64]
                    Company name
char   Street[80]
                    Street
char   City[32]   City
char   **State**.sub.-- Province[32]
                    State or province name
char   Zip.sub.-- PostalCode[32]
                    Zip code or postal code
char   Country[32]
                    Country
char   **Email**[64] **Email** address
char   Telephonel[32]
                    Office phone number
char   Telephone2[32]
                    Office phone number
char   Fax[32]   Fax number
V.sub.-- CBACK (lparam.   .   .

ABSTRACT:
A laptop computer system includes a protected mode microprocessor capable
of operating in restricted and unrestricted modes, and an arrangement
which in response to a predetermined condition saves information from the
processor and then forcibly switches the processor to its unrestricted
mode of operation. The system includes a first interrupt mask register
having a bit for indicating whether an interrupt is to be recognized by
the processor, a second interrupt mask register having a bit for
indicating whether the interrupt is to be recognized by a further
circuit, and an arrangement responsive to a load of the first mask
register for conforming the bit of the second mask register to the bit of
the first mask register in a manner invisible to an application program
being executed by the processor.

DETDESC:

DETD(361)

The . . . that any communications that occurred in the middle of the night would not disturb the user's sleep. Accordingly, the user's **EMAIL** program would program the modem to turn the speaker off by sending to the modem the command "ATM0". The computer, when not in use, would enter the suspend **state**, with the modem powered down. Then, in the middle of the night, a ring signal would be received from the. . . number to forward the mail to another address. If the modem simply came up to its normal default power on **state**, then the speaker would be turned on and the process of sending out the **EMAIL** in the second phone call would produce audible dial tones and dialing tones that would act like an alarm clock to the user of the system. But because the **state** of the modem is stored in the static RAM 4004 and is restored upon power up of the modem due. . .

US PAT NO: 5,493,568 [IMAGE AVAILABLE]   L13: 5 of 17

ABSTRACT:
The media dependent module provides an interface between an upper-level conferencing driver (e.g., a data-link manager) of the conferencing system and a lower-level communications driver of the conferencing system to isolate the conferencing driver from the communications driver, where the media dependent module is dependent upon hardware of the communications driver. The media dependent module is adapted to perform a plurality of functions called by the conferencing driver. The media dependent module has a connection state machine. In a preferred embodiment, the communications driver is a communications stack that conforms to one of the NetBIOS, IPX, POTS Modem, and TAPI transport standards. The conferencing system may have multiple media dependent modules, each of which provides an interface between the data-link manager and a communications stack that conforms to a different transport standard.

DETDESC:

DETD(857)

. . .
name
char   JobPosition[64]
                    Pres, VP, Manager, etc
char   CompanyName[64]
                    Company name
char   Street[80] Street
char   City[32]   city
char   **State**.sub.-- Province[32]

```
                    **State** or province name
char      Zip.sub.-- PostalCode[32]
                    Zip code or postal code
char      Country[32]
                    Country
char      **Email**[64]   **Email** address
char      Telephone1[32]
                    Office phone number
char      Telephone2[32]
                    Office phone number
char      Fax[32]       Fax number
V.sub.-- CBACK (lParam.   .   .
```

DETDESC:

DETD(2101)

```
          .    .    .
of ATTR structures. xxxx is a place
holder for the media.
ATTR FirstName;
ATTR Addr1;
ATTR Addr2;
ATTR City;
ATTR **State**;
ATTR Country;
ATTR PostalCode;
ATTR **Email**;
ATTR ISDNNum;
ATTR PhoneNum;
ATTR FaxNum;
ATTR Orgn;
ATTR Title;
} AUTOREG;
typedef struct tagDateTime
{
BYTE byMonth;
BYTE byDay;.   .   .
```

ABSTRACT:
An electronic business card system provides a compact and portable system
to read and store business card data from business cards having computer
readable data stored on computer readable storage media on the business
cards. The electronic business card system utilizes a reader coupled to a
computer control system. The electronic business card system also
provides organization and manipulation capabilities for the business card

data accept by the electronic business card system.

DETDESC:

DETD(20)

If . . . number of fields, such as those described above (e.g., the first name, last name, title, company name, company address, city, **state**, ZIP, phone number, fax number, **Email** address, area code, etc.). Preferably, the date, time and a sequence number are also recorded with each entry. When the. . .

ABSTRACT:
A method and apparatus for sending paging signals and messages to individuals within a building and accepting responses to the messages. Messages may be initiated by electronic mail, incoming telephone calls, incoming Fax messages, or other sources. Data is sent via radio to a communications unit carried by the individual and displayed visually together with possible responses. Each unit transmits its identity and responses or original messages when desired via coded infrared light (or, in an alternative embodiment, ultrasound) to one or more remote stations located in rooms or along corridors of the building. A remote station relays data to a central station also via radio, which tracks the location of units and delivers messages. Communication units are clipped to the clothing of users and can be incorporated into a corporate employee identification badge. The hybrid radio-infrared light approach combines the broad, reliable characteristics of radio communication with the ability of infrared light to allow each unit to be located. This allows highly reliable delivery of messages via an acknowledgement and retransmission protocol, two-way communication with the individual, and capabilities (such as those for transferring incoming telephone calls) that require the location of the individual to be known. The use of radio for communication from the remote station to the central station allows the system to be completely wireless, thus simplifying and reducing the cost of installation.

DETDESC:

DETD(67)

If . . . the present location of the communications unit and the time the unit last responded is looked up in the Unit **Status** List 233, a response **email** message containing this information is sent to the originator, and the module is done. (If the user has set privacy. . .

DETDESC:

DETD(68)

If . . . checked and, if the originator has the appropriate
privileges, the appropriate changes are made 234, a response message sent
235 **verifying** the changes, and the module is done. Changes to and
queries of tables that define users, user IDs, telephone extensions, and
locations and telephone extensions near remote stations are made using a
simple set of commands contained in **email** messages that can be
originated at any workstation connected via the **email** server to the
system. Users can also define preprogrammed responses, messages, and
email addresses, and set parameters, in this way.

US PAT NO: 5,450,395 [IMAGE AVAILABLE]   L13: 8 of 17

ABSTRACT:
An embodiment of the present invention is a communications system for
multiple users sharing the same maximal length code (MLC) in a code
position modulation multiple access environment. A 1023 chip length code
is transmitted with reference to an independent coordinated time source.
The code repeats every time after 1023 chips have been transmitted. The
MLC will begin each time period with the first through 1023.sup.rd chip,
depending on the data to be sent and the identity of the user
transmitting it. The chips belonging to the MLC that were not sent at the
beginning of a time period are sent at the end to complete the MLC each
time period in a wrap around fashion. Each time period can be arbitrarily
divided into subsections embracing, for example, sixteen chip times. When
so divided, more than sixty subsections are possible from one 1023 chip
MLC. Respective users are each assigned a subsection. If the transmitted
MLC begins on one of the sixteen chip time slots in a particular user's
assigned subsection, the chip time slot that the MLC does begin on will
be interpreted as communicating four bits of data, 0000 . . . 1111.

DETDESC:

DETD(17)

. . .

X   X
Inbound Call
          (Phone number)
          Calling Party ID
                        X   X
          (Phone number)
Message Waiting
          EMAIL   X
          VOICEMAIL   X

On Hook	Ready to Receive		
		X	
Off Hook	Ready to Send	X	
Dial Tone	Call. . .		
		X	X
	Hook		
Type of Call			
	Voice/Data	X	X
Call Progress			
	General Messages		
		X	X
Status	Call Waiting	X	
	Call Blocked	X	
	(Standby)		
	Outgoing Call in		
		X	
	Progress		
	Incoming Call. . .		

US PAT NO: 5,446,904 [IMAGE AVAILABLE]

ABSTRACT:
A laptop computer system includes a protected mode microprocessor capable
of operating in restricted and unrestricted modes, and an arrangement
which in response to a predetermined condition saves information from the
processor and then forcibly switches the processor to its unrestricted
mode of operation. When running a multi-tasking operating system where an
application program is being executed in a restricted mode, a
suspend/resume operation can be carried out in which the system is
substantially powered down and then powered back up, and will resume the
interrupted application with the restricted mode back-in effect. Further,
set-up changes such as adjustment of the processor speed can be made
without exiting the application program running in the restricted mode.

DETDESC:

DETD(360)

 The . . . that any communications that occurred in the middle of the
night would not disturb the user's sleep. Accordingly, the user's
EMAIL program would program the modem to turn the speaker off by
sending to the modem the command "ATM0". The computer, when not in use,
would enter the suspend **state**, with the modem powered down. Then, in
the middle of the night, a ring signal would be received from the. . .
number to forward the mail to another address. If the modem simply came
up to its normal default power on **state**, then the speaker would be
turned on and the process of sending out the **EMAIL** in the second

phone call would produce audible dial tones and dialing tones that would act like an alarm clock to the user of the system. But because the **state** of the modem is stored in the static RAM 4004 and is restored upon power up of the modem due.   .   .

ABSTRACT:
An embodiment of the present invention is a communications system for multiple users sharing the same maximal length code (MLC) in a code position modulation multiple access environment. A 1023 chip length code is transmitted with reference to an independent coordinated time source. The code repeats every time after 1023 chips have been transmitted. The MLC will begin each time period with the first through $1023.^{rd}$ chip, depending on the data to be sent and the identity of the user transmitting it. The chips belong to the MLC that were not sent at the beginning of a time period are sent at the end to complete the MLC each time period in a wrap around fashion. Each time period can be aribtrarily divided into subsections embracing, for example, sixteen chip times. When so divided, more than sixty subsections are possible from one 1023 chip MLC. Respective users are each assigned a subsection. If the transmitted MLC begins on one of the sixteen chip time slots in a particular user's assigned subsection, the chip time slot that the MLC does begin on will be interpreted as communicating four bits of data, 0000 . . . 1111.

DETDESC:

DETD(17)
      .   .   .
X   X
Inbound Call
          (Phone number)
          Calling Party ID
                        X   X
          (Phone number)
Message Waiting
          EMAIL   X
          VOICEMAIL   X
On Hook   Ready to Receive
                        X
Off Hook   Ready to Send   X
Dial Tone   Call.   .   .
                        X   X
          Hook
Type of Call
          Voice/Data   X   X
Call Progress

```
            General Messages
                         X        X
**Status**       Call Waiting     X
            Call Blocked     X
            (Standby)
            Outgoing Call in
                         X

            Progress
            Incoming Call.  .   .
```

ABSTRACT:
Information is transmitted between a multiplicity of subscribers as
components of traffic in an integrated services network, (ISN), in which
the information traffic consists of a multiplicity of media types
according to the different subscribers including voice, video, and data
traffic component types. The traffic component types in the form of
portions of respective information streams to be transmitted from
subscribers at an entry point of the ISN are assembled into the payload
of each of a sequence of composite frames for transmission through the
ISN. The traffic component types subjected to such assembly are limited
to those destined for subscribers at the same exit point of the ISN.
Traffic component types within the composite frame payload are grouped in
sets of adjacent channels of fixed bandwidth so that each group is
limited to channels containing traffic components of the same type, with
each channel assigned in its entirety to a selected subscriber. Any
unused bandwidth is compressed out of the composite frame payload before
the frame is launched into the ISN, by eliminating channels assigned to
then-inactive or only partially active subscribers.

DETDESC:

DETD(67)

   .   .   .
= 1 ms
 PCM voice average call duration = 120 seconds
 Fax call duration = 60 seconds
 Email call duration = 240 seconds
 .sup.7 Examples given are for steady **state** traffic loads. Manner in
which
 loads are achieved is irrelevant to illustrating the frequency of
 composite data frame reconfiguration. (steady **state** requires avg
turnover
 of 5 fax and 2.5 **Email** callers every 60 secs)

ABSTRACT:
Method and apparatus for information communication during call
connections between subscribers adapted to transmit and receive
multimedia information at a pair of endpoint nodes of a fast packet
switched network, the endpoint nodes being connected by a network path
including at least one transit node traversed by links of the path. The
multimedia information is conveyed as traffic consisting of a plurality
of component types from among voice, video and data traffic component
types each associated with a different subscriber at one of the endpoint
nodes. A succession of composite frames conveying information is launched
from each of the endpoint nodes to the other of the pair on the network
path, with each of the frames configured to contain a plurality of fixed
size channels representing bandwidth allocations for each of the traffic
component types. Each channel is assigned to a subscriber of the
respective traffic component type at the endpoint node from which the
composite frame wa launched for the duration of that subscriber's
respective call connection. The composite frames are dynamically
reconfigured by releasing and reassigning channels at each of the
endpoint nodes when necessary to accommodate changes in traffic flow in
the network.

DETDESC:

DETD(64)

 .   .   .
= 1 ms
 PCM voice average call duration = 120 seconds
 Fax call duration = 60 seconds
 Email call duration = 240 seconds
 .sup.7 Examples given are for steady **state** traffic loads. Manner in
which
 loads are achieved is irrelevant to illustrating frequency of composite
 data frame reconfiguration. (steady **state** requires avg turnover of 5
fax
 and 2.5 **Email** callers every 60 secs)

ABSTRACT:
A system and method of transmitting information between a multiplicity of
subscribers as components of traffic in an integrated services network
(ISN). The information traffic consists of a multiplicity of media types
associated with respective ones of the different subscribers including
voice, video and data traffic component types. Each traffic component
type has attributes relevant to transmission through the ISN which may
differ from such attributes of the other traffic component types, such as

delay sensitivity, loss tolerance, activity level, burst size, average packet length, and probability of buffer overflow. A plurality of the traffic component types to be transmitted, limited to those destined for subscribers at the same exit point of the ISN, is assembled from subscribers at an entry point of the ISN into a single composite frame of variable size for transmission along a path through the ISN. A different priority level is assigned to each traffic component type for transmission through the ISN according to the respective attributes of the traffic component types. The transmission of composite frames containing lower priority traffic component types is selectively blocked while allowing transmission of composite frames containing higher priority types during periods of traffic congestion or when control of traffic flow is otherwise required along the path.

DETDESC:

DETD(63)

. . .

= 1 ms
 PCM voice average call duration = 120 seconds
 Fax call duration = 60 seconds
 Email call duration = 240 seconds
 .sup.7 Examples given are for steady **state** traffic loads. Manner in which
 loads are achieved is irrelevant to illustrating frequency of composite
 data frame reconfiguration. (steady **state** requires avg turnover of 5 fax
 and 2.5 **Email** callers every 60 secs)

US PAT NO: 5,247,516 [IMAGE AVAILABLE]   L13: 14 of 17

ABSTRACT:
A method and system of transmitting information between a multiplicity of subscribers as components of traffic in an integrated services network (ISN). The information traffic consists of a multiplicity of media types according to the different subscribers including voice, video and data traffic component types. Each traffic component type has attributes of transmission through the ISN which may differ from transmission attributes of the other traffic component types, and the ISN also has attributes of transmission which may differ for transmission of the various traffic component types therethrough. A plurality of the traffic component types to be transmitted, limited to those destined for subscribers at the same exit point of the ISN, is assembled from subscribers at an entry point of the ISN into a single composite frame of variable size for transmission through the ISN. The traffic component types within the single composite frame are grouped into separate groups of adjacent channels for each traffic component type, so that each group

is limited to channels containing traffic components of the same type, with each channel assigned in its entirety to a selected subscriber.

DETDESC:

DETD(63)

.   .   .

= 1 ms
 PCM voice average call duration = 120 seconds
 Fax call duration = 60 seconds
 Email call duration = 240 seconds
 .sup.7 Examples given are for steady **state** traffic loads. Manner in which
 loads are achieved is irrelevant to illustrating frequency of composite
 data frame reconfiguration. (steady **state** requires avg turnover of 5 fax
 and 2.5 **Email** callers every 60 secs)

ABSTRACT:
Method and apparatus for information communication during call connections between subscribers adapted to transmit and receive multimedia information at endpoint nodes of a fast packet switched network, in which the endpoint nodes are connectable for calls via network paths including transit nodes traversed by links of the paths, and the multimedia information is conveyed as traffic consisting of a plurality of component types from among voice, video and data traffic component types each associated with a different subscriber at one of the endpoint nodes. Each of a plurality of variably sized composite frames is assembled within a preset fixed time interval from portions of information streams generated by the subscribers at an endpoint node, into respective ones of a plurality of fixed size channels representing bandwidth allocations for each of the traffic component types, with each channel dedicated to a subscriber for the duration of that subscriber's respective call connection, to produce a sequence of the composite frames in which each is separated from the next by the time interval. The sequence of composite frames is synchronously launched into the network as assembly of each of the frames is completed.

DETDESC:

DETD(63)

.   .   .

E-mail connections
Result:
        avg time between reconfigurations = 4 secs =

1 per 4,000 data frames
(steady **state** requires avg turnover
of 5 fax and 2.5 E-mail callers
every 60 secs)

.sup.6 Following assumptions. . . = 1 ms
PCM voice average call duration = 120 seconds
Fax call duration = 60 seconds
Email call duration = 240 seconds
.sup.7 Examples given are for steady **state** traffic loads. Manner in which
loads are achieved is irrelevant to illustrating frequency of composite
data frame reconfiguration.

US PAT NO: 5,200,952 [IMAGE AVAILABLE]

ABSTRACT:
Method and system for establishing call connections for information
transmission between a multiplicity of subscribers as components of
traffic in an integrated services network (ISN), in which plural
subscribers are located at different endpoint nodes of the ISN, the ISN
includes transit nodes interconnecting separate links of the ISN, and the
information traffic consists of a multiplicity of media types according
to the different subscribers including voice, video and data traffic
component types. Call connections are established as virtual circuits
(VCs) between subscribers among the various endpoint nodes of the ISN as
necessary to accommodate desired information transmissions. A plurality
of traffic component types in the form of portions of information streams
to be transmitted from subscribers at an endpoint node of the ISN to
subscribers at others of the endpoint nodes during respective call
connections between subscribers, are assembled into each of a sequence of
composite frames of variable size for transmission through the ISN, with
each composite frame transmitted between a fixed pair of the endpoint
nodes. A logical connection is anchored at each endpoint node of the pair
as a virtual circuit path (VCP) between them to accommodate a
multiplicity of VCs therebetween. The location of the VCP anchor is
shifted at the endpoint node to adapt to changes in the information
traffic pattern for subscribers thereat.

DETDESC:

DETD(63)

. . .

launch period = 1 ms PCM voice
average call duration = 120 seconds Fax call duration = 60 seconds
Email
call duration = 240 seconds

.sup.7 Examples given are for steady **state** traffic loads. Manner in which
 loads are achieved is irrelevant to illustrating frequency of composite
 data frame reconfiguration. (steady **state** requires avg turnover of 5 fax
 and 2.5 **Email** callers every 60 secs)

US PAT NO: 5,164,938 [IMAGE AVAILABLE]   L13: 17 of 17

ABSTRACT:
Method and system for transmitting information during call connections
between a multiplicity of subscribers as components of traffic in an
integrated services network (ISN), in which the information traffic
consists of a multiplicity of media types according to the different
subscribers including voice, video and data traffic component types. A
plurality of traffic component types in the form of portions of
information streams to be transmitted from subscribers at an entry point
of the ISN during respective call connections are assembled into each of
a sequence of composite frames of variable size for transmission through
the ISN. The traffic component types assembled into each of the composite
frames are limited to those destined for subscribers at the same exit
point of the ISN. Each composite frame is configured with the traffic
component types assigned to respective separate groups of adjacent
channels of predetermined bandwidth with each group limited to channels
transporting traffic components of the same type and each channel in a
group dedicated to a particular subscriber of the respective traffic
component type for the duration of its respective call connection.
Bandwidth in the composite frames is selectively seized for reallocation
among the various traffic component types during periods of traffic
congestion.

DETDESC:

DETD(63)

    .   .   .
= 1 ms
 PCM voice average call duration = 120 seconds
 Fax call duration = 60 seconds
 Email call duration = 240 seconds
 .sup.7 Examples given are for steady **state** traffic loads. Manner in which
 loads are achieved is irrelevant to illustrating frequency of composite
 data frame reconfiguration. (steady **state** requires avg turnover of 5 fax
 and 2.5 **Email** callers every 60 secs)
=> d his
      (FILE 'USPAT' ENTERED AT 10:33:10 ON 13 JAN 97)

```
L1         100862 S CONTROL?(20A)(SIMM OR SINGLE)
L2             54 S L1(200A)BIOS
L3             11 S L2(200A)(EEPROM OR NONVOLATILE OR NON VOLATILE)
L4             84 S MEMORY CONTROLLER /TI
L5            291 S MEMORY CONTROLLER /AB
L6             55 S L4 AND L5
L7             35 S L1 AND L6
L8             15 S SIMM /TI
L9             43 S SIMM /AB
L10             3 S L5 AND L9
L11             0 S L2 AND L9
L12            69 S EMAIL
L13            17 S L12(50A)(VERIF? OR STATUS OR STATE OR CONDITION)
=> s 113(100a)monitor?
           227855 MONITOR?
L14             0 L13(100A)MONITOR?
=> s mbounce
L15             0 MBOUNCE
=> s 113(50a)message
            37715 MESSAGE
L16             4 L13(50A)MESSAGE
=> d 1-4
```

1. 5,588,009, Dec. 24, 1996, Personal paging, communications, and locating system; Craig A. Will, 371/33 [IMAGE AVAILABLE]

2. 5,479,408, Dec. 26, 1995, Wireless personal paging, communications, and locating system; Craig A. Will, 370/313; 340/825.44; 370/349; 379/56; 455/38.1 [IMAGE AVAILABLE]

3. 5,450,395, Sep. 12, 1995, Code position modulation system and method for multiple user satellite communications; George R. Hostetter, et al., 370/320; 455/38.3, 50.1 [IMAGE AVAILABLE]

4. 5,313,457, May 17, 1994, Code position modulation system and method for multiple user satellite communications; George R. Hostetter, et al., 370/320; 375/200 [IMAGE AVAILABLE]

```
=> d 1-4 fd,rel,as

US PAT NO:      5,588,009 [IMAGE AVAILABLE]          L16: 1 of 4
DATE FILED:     Feb. 3, 1994

US PAT NO:      5,479,408 [IMAGE AVAILABLE]          L16: 2 of 4
DATE FILED:     Feb. 22, 1994

US PAT NO:      5,450,395 [IMAGE AVAILABLE]          L16: 3 of 4
DATE FILED:     Jan. 10, 1994
```

REL-US-DATA: Division of Ser. No. 868,985, Apr. 14, 1992, Pat. No.
                 5,313,457.
ASSIGNEE: Trimble Navigation Limited, Sunnyvale, CA (U.S. corp.)

US PAT NO: 5,313,457 [IMAGE AVAILABLE]
DATE FILED: Apr. 14, 1992
ASSIGNEE: Trimble Navigation Limited, Sunnyvale, CA (U.S. corp.)
=> s process status or ps
        888051 PROCESS
         62034 STATUS

           244 PROCESS STATUS
               (PROCESS(W)STATUS)
         26605 PS
L17   26844 PROCESS STATUS OR PS
=> s l17(100a)(email or message or send? or mail?)
            69 EMAIL
         37715 MESSAGE
         98326 SEND?
         11426 MAIL?
L18   469 L17(100A)(EMAIL OR MESSAGE OR SEND? OR MAIL?)
=> s 118(100a)(monitor? or request? or remote)

        227855 MONITOR?
         52310 REQUEST?
        197050 REMOTE

L19   93 L18(100A)(MONITOR? OR REQUEST? OR REMOTE)
=> s (unix or linux or hpunix or aix) and l19
          1759 UNIX
             0 LINUX
             0 HPUNIX
           330 AIX
L20   5 (UNIX OR LINUX OR HPUNIX OR AIX) AND L19
=> d 1-5

1. 5,590,181, Dec. 31, 1996, Call-processing system and method; Steven
J. Hogan, et al., 379/114, 201, 223 [IMAGE AVAILABLE]

2. 5,586,175, Dec. 17, 1996, Call-processing system and method; Steven
J. Hogan, et al., 379/112, 113, 196 [IMAGE AVAILABLE]

3. 5,504,897, Apr. 2, 1996, Method and apparatus for processing
electronic mail in parallel; Stevens Gans, et al., 395/615; 364/281.3,
284.3, DIG.1; 395/672 [IMAGE AVAILABLE]

4. 5,230,051, Jul. 20, 1993, Distributed messaging system and method;

Suu Quan, 395/680; 364/222.2, 228.1, 240.8, 241.7, 242.5, 242.94, 242.96, 244, 244.3, 262.4, 264, 268.9, 280, 284, 284.3, 286, 286.1, DIG.1; 395/200.03 [IMAGE AVAILABLE]

5. 5,113,523, May 12, 1992, High performance computer system; Stephen R. Colley, et al., 395/800; 364/221, 221.7, 231.8, 232.1, 232.8, 235, 237.2, 237.3, 238, 238.3, 239, 240, 241.9, 242.3, 243, 243.4, 243.41, 244, 244.6, 244.9, 247, 247.1, 247.2, 247.3, 248.1, 248.2, 252, 259, 268, 268.9, 270, 270.5, 280, 280.1, 280.2, 280.4, 281.3, 281.7, 736, DIG.1 [IMAGE AVAILABLE]
=> d 1-5 ab,kwic

ABSTRACT:
A system and method for processing telephone calls and providing enhanced services is presented. The call processing system includes a network control processor for controlling the processing and routing of the calls and for providing enhanced features, and a matrix switch for routing calls from an originating location to a terminating location. Operator consoles can be included to provide operator assistance to the caller. The network control processor comprises a central message processor that receives call dam, determines the type of call, determines the processing required, and determines whether operator assistance is required. A call route distributor allocates an operator console to the call if required. A billing server is used to track billing information for the call while it is in progress. A database server is provided for database look-ups and storage. The call processing system also includes a validation system, a billing system, a distribution system, and a fraud detection and prevention system. The validation system is used to validate call information to determine whether the call can be placed. The billing system determines rates for calls and calculates the cost of completed calls. The distribution system distributes changes that are made to a master database to the appropriate slave database. The fraud detection and prevention system monitors originating and in-process calls to detect and possibly prevent possible fraudulent uses of phone services and systems. A client interface is provided to facilitate communications among applications and DEF records are used to define specific call processing actions.

DETDESC:

DETD(428)

  When a **request** to end the program is detected, main root procedure kernel EB102 is responsible for cleanup operations. These are illustrated in steps EC118 through EC226. In a step EC118, main root procedure kernel

EB102 posts a **message** to error box AG104 indicating the reason the application was terminated. In a step EC220, main root procedure kernel EB102. . . server star memory. Server slat memory is shared system memory which can be accessed by both BSRVR BA108 and server **monitor** FA212 and used to communicate **process** **status** (illustrated in FIG. 69).

DETDESC:

DETD(519)

The DBS BA104 illustrated in FIG. 69 is a server that can run in a **UNIX** or an OS/2 environment, for example. In these environments, multiple services FA210 can each run as multiple applications. In a. .
.

DETDESC:

DETD(560)

In . . . embodiment, stats process FA208 does not communicate via LAN BA122. Instead, in the preferred embodiment, stats process FA208 is a **Unix**.TM. process that communicates via **Unix**.TM. signals to control process FA202.

DETDESC:

DETD(895)

A . . . platform or multiple platforms as required. Any type of operating system can be utilized. A suitable type is one using **UNIX**.TM. OS/2.

US PAT NO: 5,586,175 [IMAGE AVAILABLE]   L20: 2 of 5

ABSTRACT:
A system and method for processing telephone calls and providing enhanced services is presented. The call processing system includes a network control processor for controlling the processing and routing of the calls and for providing enhanced features, and a matrix switch for routing calls from an originating location to a terminating location. Operator consoles can be included to provide operator assistance to the caller. The network control processor comprises a central message processor that receives call data, determines the type of call, determines the processing required, and determines whether operator assistance is required. A call route distributor allocates an operator console to the call if required. A billing server is used to track billing information

for the call while it is in progress. A database server is provided for database look-ups and storage. The call processing system also includes a validation system, a billing system, a distribution system, and a fraud detection and prevention system. The validation system is used to validate call information to determine whether the call can be placed. The billing system determines rates for calls and calculates the cost of completed calls. The distribution system distributes changes that are made to a master database to the appropriate slave database. The fraud detection and prevention system monitors originating and in-process calls to detect and possibly prevent possible fraudulent uses of phone services and systems. A client interface is provided to facilitate communications among applications and DEF records are used to define specific call processing actions.

DETDESC:

DETD(428)

When a **request** to end the program is detected, main root procedure kernel EB102 is responsible for cleanup operations. These are illustrated in steps EC118 through EC226. In a step EC118, main root procedure kernel EB102 posts a **message** to error box AG104 indicating the reason the application was terminated. In a step EC220, main root procedure kernel EB102. . . server slat memory. Server slat memory is shared system memory which can be accessed by both BSRVR BA108 and server **monitor** FA212 and used to communicate **process** **status** (illustrated in FIG. 69).

DETDESC:

DETD(519)

The DBS BA104 illustrated ill FIG. 69 is a server that can run in a **UNIX** or an OS/2 environment, for example. In these environments, multiple services FA210 can each run as multiple applications. In a. .

DETDESC:

DETD(560)

In . . . embodiment, stats process FA208 does not communicate via LAN BA122. Instead, in the preferred embodiment, stats process FA208 is a **Unix**.TM. process that communicates via **Unix**.TM. signals to control process FA202.

DETDESC:

DETD(896)

 A . . . platform or multiple platforms as required. Any type of
operating system can be utilized. A suitable type is one using
UNIX.TM. OS/2.

ABSTRACT:
The present invention provides a method and apparatus for processing
electronic mail in parallel. The present invention provides the ability
to process mail objects in an electronic mail system in parallel. A
message can be assigned to a queue. One or more processes can manage a
plurality of messages in the queue. Each process can identify the next
entry to be processed. Entries previously processed can be marked such
that subsequent access is locked out. Mail objects and process
information can be stored in a relational database system that provides
the ability to perform locking at the record level. A process can be
configured to perform a plurality of activities in a plurality of time
periods. A guardian process can initiate or terminate other processes
based on process information. Further, a guardian process examines system
information periodically and identifies any need to initiate, restart, or
stop one or more processes. Further, the guardian process can pass
process information to an initiated process. One or more tables can be
used to retain message information such as a instance table that includes
a queue column. Further, tables can be used to retain process information
such as process, process parameters, and process time tables.

DETDESC:

DETD(14)

 A postman process, for example, delivers local **mail** items (e.g.,
scheduling and **mail**), **remote** **mail** items, handles triggered
mail items (e.g., return receipts and auto-forward), and **send**
notification of new messages locally. A scheduler process can be used to
handle scheduling **requests**. A replicator process can be used to
synchronize directory information. A **monitor** process can be used to
check **message** flow, database space usage, and **process** **status**.
A garbage collector process can remove unneeded **mail** items (e.g.,
unowned messages) and reclaim the space used for these items. A process,
a guardian process, can act as.   .   .

DETDESC:

DETD(67)

FIG. . . . and instanceId) is generated to pass to the spawned
process. The process is spawned (e.g., using a fork operation in
Unix) and the parameters are passed to the new process at block 806.
At block 808, information associated with the spawned. . .

ABSTRACT:
A computer based message passing system and method provides reliable,
versatile, portable and robust data communication between processes. The
message passing system and method is adapted for use with one or more
computers for controlling the message passing system and method. The
message passing system and method includes a shared memory area in which
data regarding the status and location of application processes and
computers are stored. Any intelligent subsystem participating in the
message passing system and method can query the shared memory for
information. One subsystem monitors the location and status of
application processes and updates the shared memory area as needed.
Another subsystem routes messages from one process to another, and
ensures that the messages are delivered properly. A mailbox feature is
provided to hold messages in cases in which a destination process is not
able to receive the message at the time delivered. The message passing
system and method, in its software embodiment, includes five subroutines
and four utilities.

SUMMARY:

BSUM(10)

  Still another conventional message passing system is built into the AT&T
UNIX Operating System (System V version). **UNIX** System V offers a
generic message queue mechanism for communicating among cooperating
application processes (cooperating processes are those processes that. .
.

SUMMARY:

BSUM(16)

  ISIS was also built to run on **UNIX** and **UNIX**-like operating
systems only. It would therefore be difficult to implement ISIS on other
kinds of operating systems. This lack of. . .

SUMMARY:

BSUM(17)

ISIS . . . ISIS, ISIS is better suited for use by software engineers, not customers and applications engineers. Additionally, the full complement of **UNIX** I/O calls, message calls, semaphores, signals, and timers could not be used under ISIS, because **UNIX** blocking system calls and ISIS calls cannot effectively be used in the same environment.

SUMMARY:

BSUM(34)

When a preferred embodiment of the invention is run under the **UNIX** operating system, these logical communications processes are denoted "logical network daemons" and have the function of forwarding a message to. . .

SUMMARY:

BSUM(41)

When a preferred embodiment of the invention is run under the **UNIX** operating system, these processes are denoted "logical administrative daemons." In this embodiment, each computer has one logical administrative daemon associated. . .

DETDESC:

DETD(5)

In . . . system software is written in the "C" programming language and operates on HP9000 series 320 and 350 workstations running the **UNIX** operating system HP-UX5.17. Only industry standard features are used as a base, including AT&T SYS V shared memory, semaphores, message. . .

DETDESC:

DETD(24)

Referring now to FIG. 2, in an embodiment run under the **UNIX** operating system, a block diagram shows the operation of the broadcast subroutine 200. At a block 202, the application and. . .

DETDESC:

DETD(25)

Each logical administrative daemon will post the application **process**
status on the appropriate process group's bulletin board, as
indicated by a block 208. The local logical administrative daemon then
spawns. . . logical network daemons if logical network daemons are not
already present, as indicated by a block 210. "Spawn" is a **UNIX** term
meaning create or generate. These daemons coordinate communication
between the local application process and **remote** application
processes. A block 212 shows that the **message** passing system is
operational after this broadcast subroutine has been fully executed.

DETDESC:

DETD(27)

 Referring . . . to FIG. 3, a block diagram shows the operation of the
connect subroutine 300 in an embodiment run under the **UNIX** operating
system.

DETDESC:

DETD(35)

 Turning . . . to FIG. 4, a block diagram depicts the operation of the
send subroutine 400 in an embodiment run under the **UNIX** operating
system. At a block 402 it is shown that the send routine is initiated.
The input from the application. . .

DETDESC:

DETD(40)

 Referring . . . to FIG. 5, a block diagram depicts the operation of
the receive subroutine 500 in an embodiment run under the **UNIX**
operating system.

DETDESC:

DETD(44)

 In an embodiment run under the **UNIX** operating system, the local
administrative process recognizes that the application process is down
through use of a special semaphore. All cooperating processes set a
common semaphore to a non-zero value (generally 1). When an application
process terminates, **UNIX** changes the value of this semaphore to 0.
UNIX then notifies the administrative process of the change.

DETDESC:

DETD(45)

Referring . . . to FIG. 6, a block diagram depicts the operation of the broadcast-off subroutine 600 in an embodiment run under the **UNIX** operating system. At a block 602, it is shown that the broadcast-off subroutine is initiated by an application process. Once. . .

DETDESC:

DETD(50)

A . . . then obtains information about the new computer as described below and in FIGS. 7 and 8. "Birth" and "death" are **UNIX** terms which denote the creation and termination of a process.

DETDESC:

DETD(51)

Various . . . and the steps involved in the birth, operation, and death of logical network daemons in the preferred embodiment of the **UNIX** operating system.

DETDESC:

DETD(52)

Referring . . . 7, a block diagram depicts the steps involved in adding a message passing service in an embodiment run under the **UNIX** operating system. This feature allows new services to be added to the present invention and thus increases the versatility of. . .

DETDESC:

DETD(56)

Referring now to FIG. 8, in an embodiment run under the **UNIX** operating system, a block diagram depicts the steps involved in the birth of a logical network daemon.

DETDESC:

DETD(60)

Referring now to FIG. 9, in an embodiment run under the **UNIX** operating system, a block diagram depicts the operation of a logical

network daemon after its birth.

DETDESC:

DETD(63)

Referring now to FIGS. 10 and 11, in embodiments run under the **UNIX** operating system, block diagrams depict the steps involved in the death of a logical network daemon.

ABSTRACT:
A parallel processor comprised of a plurality of processing nodes (10), each node including a processor (100-114) and a memory (116). Each processor includes means (100, 102) for executing instructions, logic means (114) connected to the memory for interfacing the processor with the memory and means (112) for internode communication. The internode communication means (112) connect the nodes to form a first array (8) of order n having a hypercube topology. A second array (21) of order n having nodes (22) connected together in a hypercube topology is interconnected with the first array to form an order n+1 array. The order n+1 array is made up of the first and second arrays of order n, such that a parallel processor system may be structured with any number of processors that is a power of two. A set of I/O processors (24) are connected to the nodes of the arrays (8, 21) by means of I/O channels (106). The means for internode communication (112) comprises a serial data channel driven by a clock that is common to all of the nodes.

DETDESC:

DETD(578)

In may ways the Operating System is similar to **UNIX**.TM. (**UNIX** is a Bell Laboratories trademark), and therefore will not be described in detail herein. The IX.TM. System does, however, have.   .   .

DETDESC:

DETD(643)

The operating system, IX.TM., is a high performance **UNIX**-style interface to the hardware. It supports multiple users, including password and billing, and multitasking. The editor, NMACS, is screen oriented.   .   .   operating software because nearly every system resource is treated as a type of file. The file system is hierarchical like **UNIX** but has extensive mechanisms for file protection and sharing. The operating

system treats memory as a collection of segments that.   .   .

DETDESC:

DETD(647)

  There .   .   . in the IX.TM. system. One is a line editor called "ed".
It is compatible with the "ed" line editor in **UNIX**. Another is a
stream editor whose name is "sed". Sed is also compatible with the
UNIX stream editor of the same name. For detailed information see the
extensive literature on standard **UNIX** systems (e.g. B. W. Kernighan's
books: "A Tutorial Introduction to the ED Text Editor" and "Advanced
editing on **UNIX**").

DETDESC:

DETD(715)

   .   .   .
( )
GREP: pattern search
HELP: help
HD: hex dump
KILL: kill process
LN: make a link
LS: list directory
MAIL: local **mail**
MAN: print manual
MESG: messages (yes/no)
MORE: paged display
MOUNT: mount file system
NM: screen editor (NMACS)
NSH: shell (see SH)
PASSWD: change password
PR: print file
PS: **process** **status**
PSTAT: system status
PWD: working directory
RM: remove file
RMLN: remove link
ROFF: text formatter
SA: system accounting
SED: stream editor
SH: shell
SHUT: invoke RAM **Monitor**
SLEEP: suspend process
SORT: sort or merge
SPLIT: split a file

```
STTY:           set terminal
TEE:            pipe with file save
WAIT:           wait for completion
WALL:           write to all users
WHO:            display system users
WRITE:          **send** text
```

```
=> d his
     (FILE 'USPAT' ENTERED AT 10:33:10 ON 13 JAN 97)
L1      100862 S CONTROL?(20A)(SIMM OR SINGLE)
L2          54 S L1(200A)BIOS
L3          11 S L2(200A)(EEPROM OR NONVOLATILE OR NON VOLATILE)
L4          84 S MEMORY CONTROLLER /TI
L5         291 S MEMORY CONTROLLER /AB
L6          55 S L4 AND L5
L7          35 S L1 AND L6
L8          15 S SIMM /TI
L9          43 S SIMM /AB
L10          3 S L5 AND L9
L11          0 S L2 AND L9
L12         69 S EMAIL
L13         17 S L12(50A)(VERIF? OR STATUS OR STATE OR CONDITION)
L14          0 S L13(100A)MONITOR?
L15          0 S MBOUNCE
L16          4 S L13(50A)MESSAGE
L17      26844 S PROCESS STATUS OR PS
L18        469 S L17(100A)(EMAIL OR MESSAGE OR SEND? OR MAIL?)
L19         93 S L18(100A)(MONITOR? OR REQUEST? OR REMOTE)
L20          5 S (UNIX OR LINUX OR HPUNIX OR AIX) AND L19
=>
```